

Fig. 1

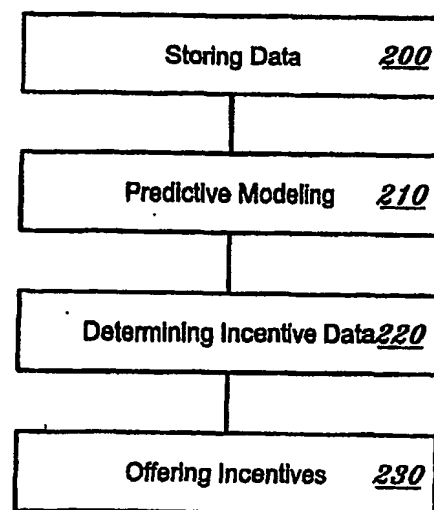


Fig. 2

Fig. 3A

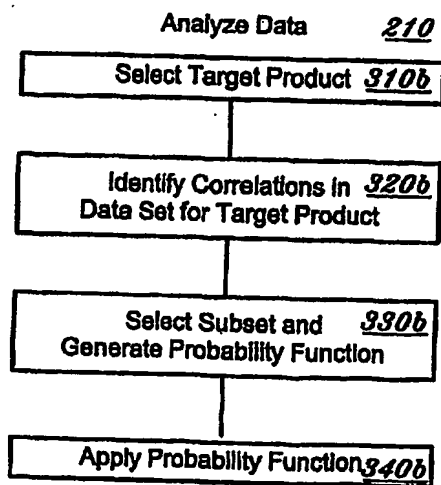
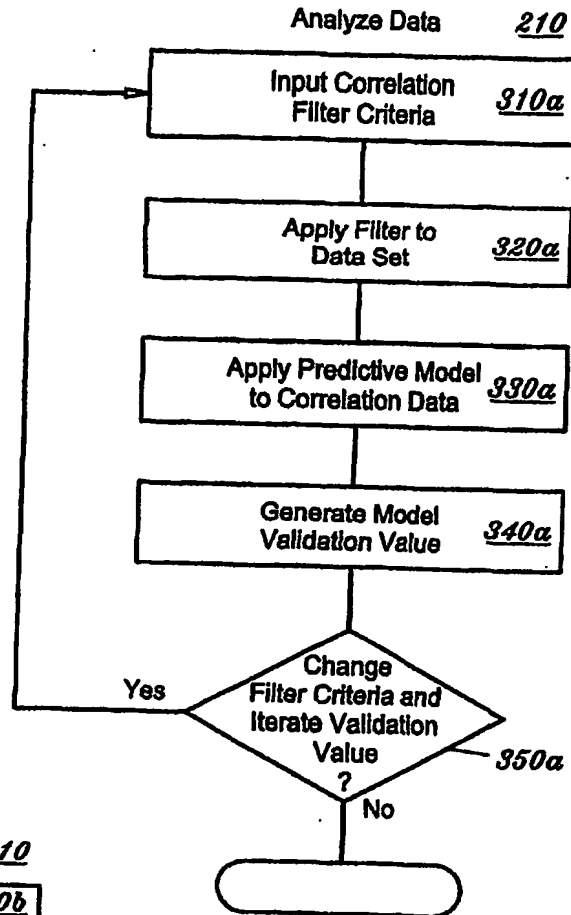


Fig. 3B

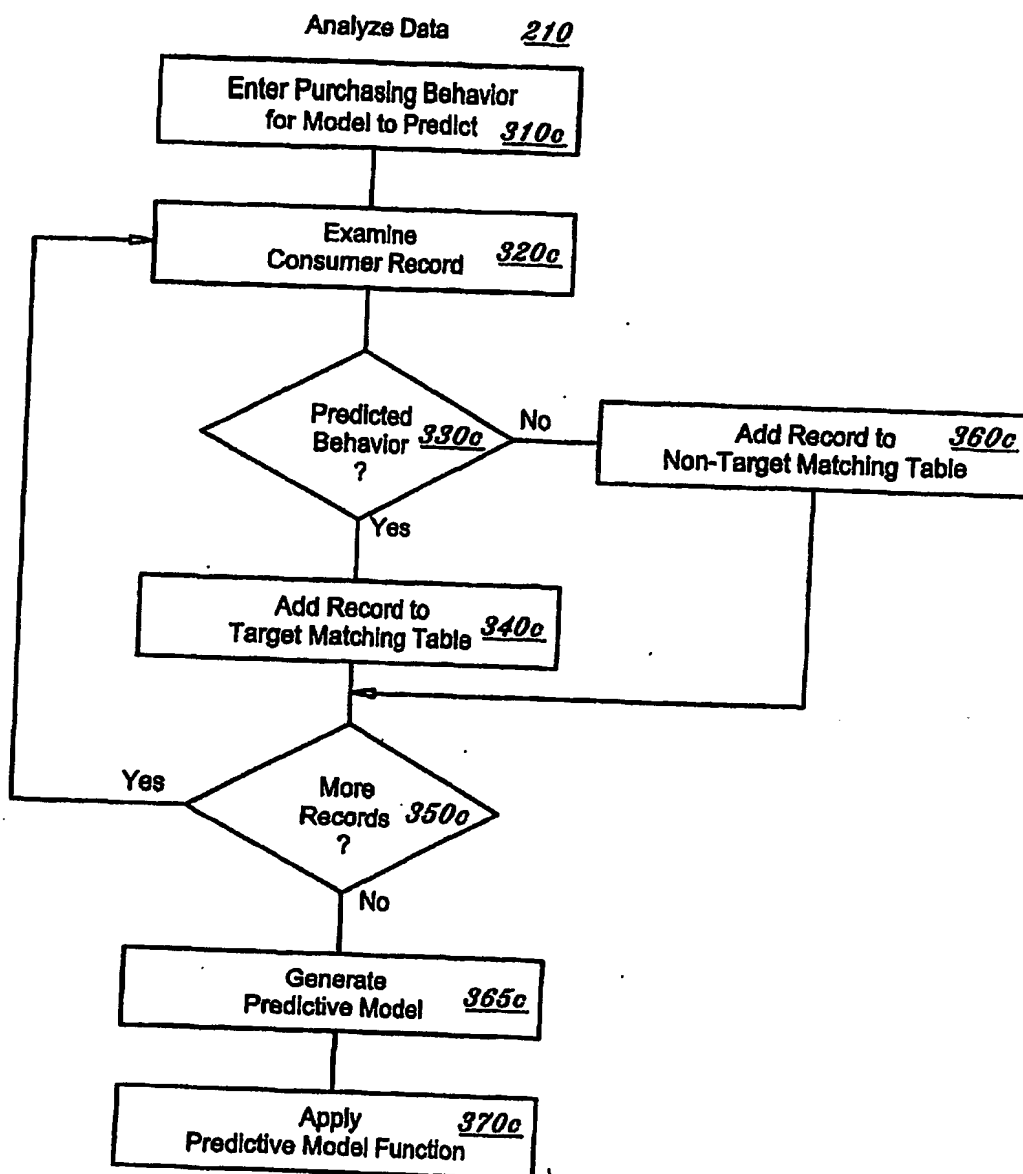


Fig. 3C

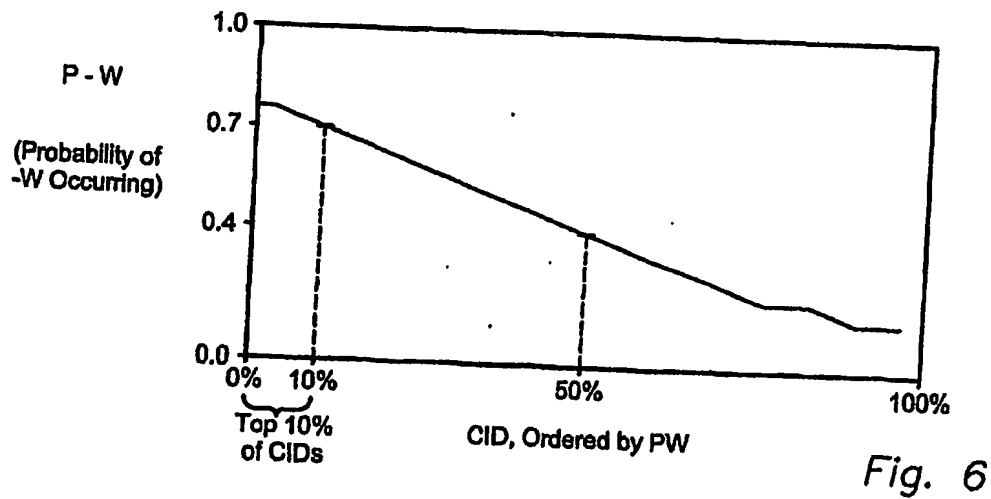
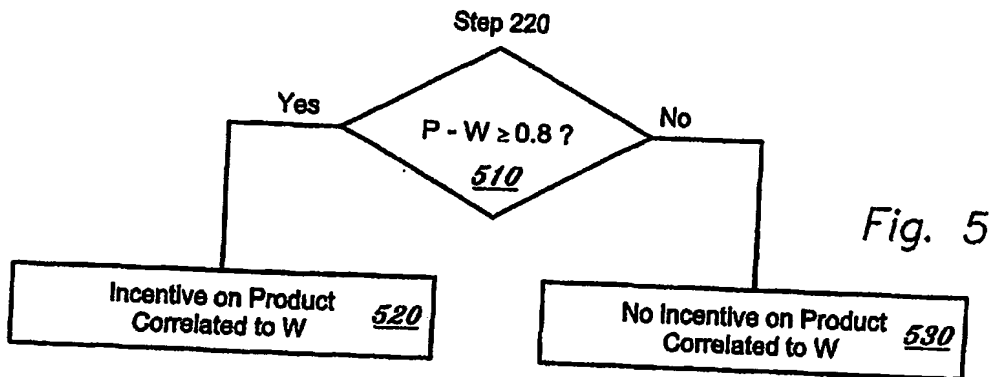
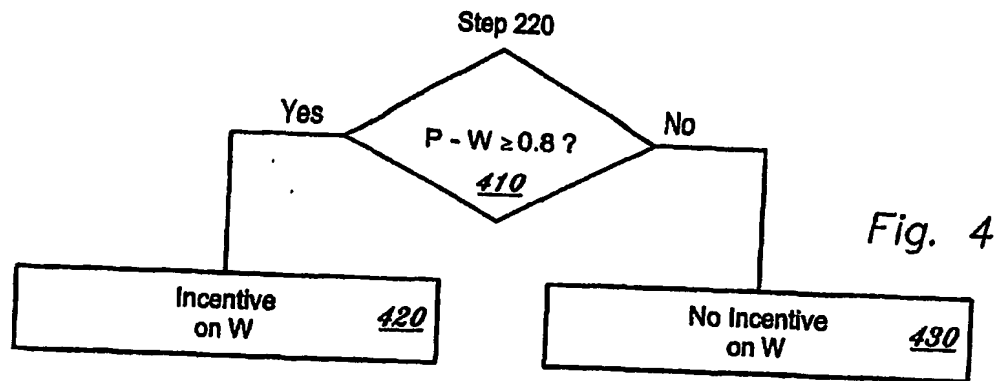


Table 1 - Records of transactions of a consumer

DATE	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
1/1/00	1	0	0	1	0	0	0	3	0	2	0	1
1/13/00	0	1	0	0	0	0	3	0	1	0	0	0
1/17/00	0	0	0	0	0	0	0	0	0	0	0	1
2/1/00	1	0	0	1	0	0	0	1	0	1	0	0
2/17/00	0	0	0	0	0	1	0	0	0	0	0	0
2/28/00	1	2	0	1	0	0	1	0	1	0	0	1
3/4/00	0	0	0	0	1	0	0	0	0	0	0	0
3/12/00	0	0	1	0	1	0	0	0	0	0	0	1
3/27/00	1	0	0	2	0	0	2	0	1	0	0	1
4/10/00	0	2	0	1	0	1	0	0	1	0	0	0
5/1/00	0	0	0	1	0	0	0	0	0	0	0	0
5/7/00	1	1	0	2	0	0	1	0	1	0	0	2
5/19/00	1	0	0	0	0	1	0	0	1	0	0	0

FIG. 7

Table 2 - Purchases of consumer of table 1, cumulated by month

DATE	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
1/00	1	1	0	1	0	0	3	3	1	2	0	2
2/00	2	2	0	2	0	1	1	1	1	1	0	1
3/00	1	0	1	2	2	0	2	0	1	0	0	2
4/00	0	2	0	1	0	1	0	0	1	0	0	0
5/00	2	1	0	3	0	1	1	0	2	0	0	2

FIG. 8

Table 3 - fraction of records having a non-zero value (uncorrelated)

DATE	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
1/00	0.4	0.2	0.3	0.7	0.6	0.1	0.3	0.3	0.1	0.2	0.2	0.3
2/00	0.5	0.4	0.5	0.7	0.8	0.2	0.5	0.5	0.1	0.3	0.5	0.5
3/00	0.5	0.5	0.4	0.7	0.7	0.1	0.5	0.5	0.2	0.2	0.4	0.4
4/00	0.4	0.5	0.5	0.4	0.7	0.2	0.5	0.4	0.1	0.2	0.4	0.5
5/00												.3

FIG. 9

Table 4 - fraction of consumer records having a non-zero value (correlated)

DATE	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
1/00	0.4	0.2	0.3	0.7	0.6	0.1	0.3	0.3	0.1	0.2	0.2	0.3
2/00	0.5	0.4	0.5	0.7	0.8	0.2	0.5	0.5	0.1	0.3	0.5	0.5
3/00	0.6	0.5	0.4	0.8	0.9	0.1	0.5	0.4	0.2	0.2	0.2	0.6
4/00	0.6	0.6	0.5	0.8	0.7	0.2	0.5	0.2	0.1	0.2	0.1	0.4
5/00												1

FIG. 10

Table 5 - Difference between tables 3 and 4

DATE	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12
1/00	0	0	0	0	0	0	0	0	0	0	0	0
2/00	0	0	0	0	0	0	0	0	0	0	0	0
3/00	0.1	0	0.1	0.2	0	0	0	-0.1	0	0	-0.2	0.2
4/00	0.2	0.1	0	0.4	0	0	0	-0.2	0	0	-0.3	-0.1

FIG. 11